

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/520,946DATE: 10/13/95  
TIME: 21:12:14

INPUT SET: S6642.raw

This Raw Listing contains the General  
Information Section and up to the first 5 pages.

## SEQUENCE LISTING

1  
2  
3 (1) General Information:  
4  
5 (i) APPLICANT: BROW, MARY ANN D.  
6 LYAMICHEV, VICTOR I.  
7 OLIVE, DAVID M.  
8  
9 (ii) TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF  
10 PATHOGENS  
11  
12 (iii) NUMBER OF SEQUENCES: 160  
13  
14 (iv) CORRESPONDENCE ADDRESS:  
15 (A) ADDRESSEE: MEDLEN & CARROLL  
16 (B) STREET: 220 MONTGOMERY STREET, SUITE 2200  
17 (C) CITY: SAN FRANCISCO  
18 (D) STATE: CALIFORNIA  
19 (E) COUNTRY: UNITED STATES OF AMERICA  
20 (F) ZIP: 94104  
21  
22 (v) COMPUTER READABLE FORM:  
23 (A) MEDIUM TYPE: Floppy disk  
24 (B) COMPUTER: IBM PC compatible  
25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
26 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25  
27  
28 (vi) CURRENT APPLICATION DATA:  
29 (A) APPLICATION NUMBER: US  
30 (B) FILING DATE:  
31 (C) CLASSIFICATION:  
32  
33 (viii) ATTORNEY/AGENT INFORMATION:  
34 (A) NAME: CARROLL, PETER G.  
35 (B) REGISTRATION NUMBER: 32,837  
36 (C) REFERENCE/DOCKET NUMBER: FORS-01756  
37  
38 (ix) TELECOMMUNICATION INFORMATION:  
39 (A) TELEPHONE: (415) 705-8410  
40 (B) TELEFAX: (415) 397-8338  
41  
42 (2) INFORMATION FOR SEQ ID NO:1:  
43  
44 (i) SEQUENCE CHARACTERISTICS:  
45 (A) LENGTH: 2506 base pairs  
46 (B) TYPE: nucleic acid

ENTERED

**INPUT SET: S6642.raw**

47	(C) STRANDEDNESS: double						
48	(D) TOPOLOGY: linear						
49							
50	(ii) MOLECULE TYPE: DNA (genomic)						
51							
52	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:						
53							
54	ATGAGGGGGA	TGCTGCCCTT	CTTTGAGCCC	AAGGGCCGGG	TCCTCCTGGT	GGACGGCCAC	60
55							
56	CACCTGGCCT	ACCGCACCTT	CCACGCCCTG	AAGGGCCTCA	CCACCAGCCG	GGGGGAGCCG	120
57							
58	GTGCAGGCGG	TCTACGGCTT	CGCCAAGAGC	CTCCTCAAGG	CCCTCAAGGA	GGACGGGGAC	180
59							
60	GCGGTGATCG	TGGTCTTTGA	CGCCAAGGCC	CCCTCCTTCC	GCCACGAGGC	CTACGGGGGG	240
61							
62	TACAAGGCGG	GCCGGGCCCC	CACGCCGGAG	GACTTTCCCC	GGCAACTCGC	CCTCATCAAG	300
63							
64	GAGCTGGTGG	ACCTCCTGGG	GCTGGCGCGC	CTCGAGGTCC	CGGGCTACGA	GGCGGACGAC	360
65							
66	GTCTTGGCCA	GCCTGGCCAA	GAAGGCGGAA	AAGGAGGGCT	ACGAGGTCCG	CATCCTCACC	420
67							
68	GCCGACAAAG	ACCTTTACCA	GCTCCTTTCC	GACCGCATCC	ACGTCCTCCA	CCCCGAGGGG	480
69							
70	TACCTCATCA	CCCCGGCCTG	GCTTTGGGAA	AAGTACGGCC	TGAGGCCCCGA	CCAGTGGGCC	540
71							
72	GACTACCGGG	CCCTGACCGG	GGACGAGTCC	GACAACCTTC	CCGGGGTCAA	GGGCATCGGG	600
73							
74	GAGAAGACGG	CGAGGAAGCT	TCTGGAGGAG	TGGGGGAGCC	TGGAAGCCCT	CCTCAAGAAC	660
75							
76	CTGGACCGGC	TGAAGCCCGC	CATCCGGGAG	AAGATCCTGG	CCCACATGGA	CGATCTGAAG	720
77							
78	CTCTCCTGGG	ACCTGGCCAA	GGTGCGCACC	GACCTGCCCC	TGGAGGTGGA	CTTCGCCAAA	780
79							
80	AGGCGGGAGC	CCGACCGGGA	GAGGCTTAGG	GCCTTTCTGG	AGAGGCTTGA	GTTTGGCAGC	840
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82	CTCCTCCACG	AGTTCGGCCT	TCTGGAAAAG	CCCAAGGCCC	TGGAGGAGGC	CCCCTGGCCC	900
83							
84	CCGCCGGAAG	GGGCC'TTCGT	GGGCTTTGTG	CTTTCCCGCA	AGGAGCCCAT	GTGGGCCGAT	960
85							
86	CTTCTGGCCC	TGGCCGCCGC	CAGGGGGGGC	CGGGTCCACC	GGGCCCCCGA	GCCTTATAAA	1020
87							
88	GCCCTCAGGG	ACCTGAAGGA	GGCGCGGGGG	CTTCTCGCCA	AAGACCTGAG	CGTTCTGGCC	1080
89							
90	CTGAGGGAAG	GCCTTGGCCT	CCCGCCCGGC	GACGACCCCA	TGCTCCTCGC	CTACCTCCTG	1140
91							
92	GACCC'TTCCA	ACACCACCCC	CGAGGGGGTG	GCCCGGCGCT	ACGGCGGGGA	GTGGACGGAG	1200
93							
94	GAGGCGGGGG	AGCGGGCCGC	CCTTTCCGAG	AGGCTCTTCG	CCAACCTGTG	GGGGAGGCTT	1260
95							
96	GAGGGGGAGG	AGAGGCTCCT	TTGGCTTTAC	CGGGAGGTGG	AGAGGCCCCC	TTCCGCTGTC	1320
97							
98	CTGGCCCACA	TGGAGGCCAC	GGGGGTGCGC	CTGGACGTGG	CCTATCTCAG	GGCCTTGTCC	1380
99							

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/520,946DATE: 10/13/95  
TIME: 21:12:19

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102	CCCTTCAACC TCAACTCCCG GGACCAGCTG GAAAGGGTCC TCTTTGACGA GCTAGGGCTT	1500
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104	CCCGCCATCG GCAAGACGGA GAAGACCGGC AAGCGCTCCA CCAGCGCCGC CGTCCCTGGAG	1560
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106	GCCCTCCGCG AGGCCACCC CATCGTGGAG AAGATCCTGC AGTACCGGGA GCTCACCAAG	1620
107		
108	CTGAAGAGCA CCTACATTGA CCCCTTGCCG GACCTCATCC ACCCCAGGAC GGGCCGCCTC	1680
109		
110	CACACCCGCT TCAACCAGAC GGCCACGGCC ACGGGCAGGC TAAGTAGCTC CGATCCCAAC	1740
111		
112	CTCCAGAACA TCCCCGTCCG CACCCGCTT GGGCAGAGGA TCCGCCGGGC CTTCATCGCC	1800
113		
114	GAGGAGGGGT GGCTATTGGT GGCCCTGGAC TATAGCCAGA TAGAGCTCAG GGTGCTGGCC	1860
115		
116	CACCTCTCCG GCGACGAGAA CCTGATCCGG GTCTTCCAGG AGGGGCGGGA CATCCACACG	1920
117		
118	GAGACCGCCA GCTGGATGTT CGGCGTCCCC CGGGAGGCCG TGGACCCCTT GATGCGCCGG	1980
119		
120	GCGGCCAAGA CCATCAACTT CGGGGTCTCT TACGGCATGT CGGCCACCG CCTCTCCAG	2040
121		
122	GAGCTAGCCA TCCCTTACGA GGAGGCCAG GCCTTCATTG AGCGCTACTT TCAGAGCTTC	2100
123		
124	CCCAAGGTGC GGGCCTGGAT TGAGAAGACC CTGGAGGAGG GCAGGAGGCG GGGGTACGTG	2160
125		
126	GAGACCCTCT TCGGCCGCG CCGCTACGTG CCAGACCTAG AGGCCCGGGT GAAGAGCGTG	2220
127		
128	CGGGAGGCGG CCGAGCGCAT GGCCTTCAAC ATGCCCGTCC AGGGCACCGC CGCCGACCTC	2280
129		
130	ATGAAGCTGG CTATGGTGAA GCTCTTCCCC AGGCTGGAGG AAATGGGGGC CAGGATGCTC	2340
131		
132	CTTCAGGTCC ACGACGAGCT GGTCTCTGAG GCCCCAAAAG AGAGGGCGGA GGCCGTGGCC	2400
133		
134	CGGCTGGCCA AGGAGGTCAT GGAGGGGGTG TATCCCCTGG CCGTGCCCTT GGAGGTGGAG	2460
135		
136	GTGGGGATAG GGGAGGACTG GCTCTCCGCC AAGGAGTGAT ACCACC	2506
137		
138	(2) INFORMATION FOR SEQ ID NO:2:	
139		
140	(i) SEQUENCE CHARACTERISTICS:	
141	(A) LENGTH: 2496 base pairs	
142	(B) TYPE: nucleic acid	
143	(C) STRANDEDNESS: double	
144	(D) TOPOLOGY: linear	
145		
146	(ii) MOLECULE TYPE: DNA (genomic)	
147		
148	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:	
149		
150	ATGGCGATGC TTCCCCTCTT TGAGCCCCAAA GGCCGCGTGC TCCTGGTGGA CGGCCACCAC	60
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152	CTGGCCTACC GCACCTTCTT TGCCCTCAAG GGCCTCACCA CCAGCCGCGG CGAACCCGTT	120

**INPUT SET: S6642.raw**

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154	CAGGCGGTCT	ACGGCTTCGC	CAAAAGCCTC	CTCAAGGCCC	TGAAGGAGGA	CGGGGACGTG	180
155							
156	GTGGTGGTGG	TCTTTGACGC	CAAGGCCCCC	TCCTTCCGCC	ACGAGGCCTA	CGAGGCCTAC	240
157							
158	AAGGCGGGCC	GGGCCCCCAC	CCCGGAGGAC	TTTCCCCGGC	AGCTGGCCCT	CATCAAGGAG	300
159							
160	TTGGTGGACC	TCCTAGGCCT	TGTGCGGCTG	GAGGTTCCCC	GCTTTGAGGC	GGACGACGTG	360
161							
162	CTGGCCACCC	TGGCCAAGCG	GGCGGAAAAG	GAGGGGTACG	AGGTGCGCAT	CCTCACTGCC	420
163							
164	GACCGCGACC	TCTACCAGCT	CCTTTCGGAG	CGCATCGCCA	TCCTCCACCC	TGAGGGGTAC	480
165							
166	CTGATCACCC	CGGCGTGGCT	TTACGAGAAG	TACGGCCTGC	GCCCCGAGCA	GTGGGTGGAC	540
167							
168	TACCGGGCCC	TGGCGGGGGA	CCCCTCGGAT	AACATCCCCG	GGGTGAAGGG	CATCGGGGAG	600
169							
170	AAGACCGCCC	AGAGGCTCAT	CCGCGAGTGG	GGGAGCCTGG	AAAACCTCTT	CCAGCACCTG	660
171							
172	GACCAGGTGA	AGCCCTCCTT	GCGGGAGAAG	CTCCAGGCGG	GCATGGAGGC	CCTGGCCCTT	720
173							
174	TCCCGGAAGC	TTTCCCAGGT	GCACACTGAC	CTGCCCTTGG	AGGTGGACTT	CGGGAGGCGC	780
175							
176	CGCACACCCA	ACCTGGAGGG	TCTGCGGGCT	TTTTTGAGAG	GGTTGGAGTT	TGGAAGCCTC	840
177							
178	CTCCACGAGT	TCGGCCTCCT	GGAGGGGCCG	AAGGCGGCAG	AGGAGGCCCC	CTGGCCCCCT	900
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180	CCGGAAGGGG	CTTTTTTGGG	CTTTTCCTTT	TCCCGTCCCG	AGCCCATGTG	GGCCGAGCTT	960
181							
182	CTGGCCCTGG	CTGGGGCGTG	GGAGGGGCGC	CTCCATCGGG	CACAAGACCC	CCTTAGGGGC	1020
183							
184	CTGAGGGACC	TTAAGGGGGT	GCGGGGAATC	CTGGCCAAGG	ACCTGGCGGT	TTTGGCCCTG	1080
185							
186	CGGGAGGGCC	TGGACCTCTT	CCCAGAGGAC	GACCCCATGC	TCCTGGCCTA	CCTTCTGGAC	1140
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188	CCCTCCAACA	CCACCCCTGA	GGGGGTGGCC	CGGCGTTACG	GGGGGGAGTG	GACGGAGGAT	1200
189							
190	GCGGGGGAGA	GGGCCCTCCT	GGCCGAGCGC	CTCTTCCAGA	CCCTAAAGGA	GCGCCTTAAG	1260
191							
192	GGAGAAGAAC	GCCTGCTTTG	GCTTTACGAG	GAGGTGGAGA	AGCCGCTTTC	CCGGGTGTTG	1320
193							
194	GCCCGGATGG	AGGCCACGGG	GGTCCGGCTG	GACGTGGCCT	ACCTCCAGGC	CCTCTCCCTG	1380
195							
196	GAGGTGGAGG	CGGAGGTGCG	CCAGCTGGAG	GAGGAGGTCT	TCCGCCTGGC	CGGCCACCCC	1440
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198	TTCAACCTCA	ACTCCCGCGA	CCAGCTGGAG	CGGGTGCTCT	TTGACGAGCT	GGGCCTGCCT	1500
199							
200	GCCATCGGCA	AGACGGAGAA	GACGGGGAAA	CGCTCCACCA	GCGCTGCCGT	GCTGGAGGCC	1560
201							
202	CTGCGAGAGG	CCCACCCCAT	CGTGGACCGC	ATCCTGCAGT	ACCGGGAGCT	CACCAAGCTC	1620
203							
204	AAGAACACCT	ACATAGACCC	CCTGCCC GCC	CTGGTCCACC	CCAAGACCGG	CCGGCTCCAC	1680
205							

RAW SEQUENCE LISTING  
PATENT APPLICATION US/08/520,946DATE: 10/13/95  
TIME: 21:12:25

INPUT SET: S6642.raw

206	ACCCGCTTCA ACCAGACGGC CACCGCCACG GGCAGGCTTT CCAGCTCCGA CCCCAACCTG	1740
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209		
210	GAGGGCTGGG TGCTGGTGGT CTTGGACTAC AGCCAGATTG AGCTTCGGGT CCTGGCCCAC	1860
211		
212	CTCTCCGGGG ACGAGAACCT GATCCGGGTC TTTCAGGAGG GGAGGGACAT CCACACCCAG	1920
213		
214	ACCGCCAGCT GGATGTTCCG CGTTTCCCCC GAAGGGGTAG ACCCTCTGAT GCGCCGGGCG	1980
215		
216	GCCAAGACCA TCAACTTCGG GGTGCTCTAC GGCATGTCCG CCCACCGCCT CTCCGGGGAG	2040
217		
218	CTTTCCATCC CCTACGAGGA GGCGGTGGCC TTCATTGAGC GCTACTTCCA GAGCTACCCC	2100
219		
220	AAGGTGCGGG CCTGGATTGA GGGGACCCTC GAGGAGGGCC GCCGGCGGGG GTATGTGGAG	2160
221		
222	ACCCTCTTCG GCCGCCGGCG CTATGTGCCC GACCTCAACG CCCGGGTGAA GAGCGTGCGC	2220
223		
224	GAGGCGGCGG AGCGCATGGC CTTCAACATG CCGGTCCAGG GCACCGCCGC CGACCTCATG	2280
225		
226	AAGCTGGCCA TGGTGCGGCT TTTCCCCCGG CTTCAGGAAC TGGGGGCGAG GATGCTTTTG	2340
227		
228	CAGGTGCACG ACGAGCTGGT CCTCGAGGCC CCCAAGGACC GGGCGGAGAG GGTAGCCGCT	2400
229		
230	TTGGCCAAGG AGGTCATGGA GGGGGTCTGG CCCCTGCAGG TGCCCTGGA GGTGGAGGTG	2460
231		
232	GGCCTGGGGG AGGACTGGCT CTCCGCCAAG GAGTAG	2496
233		

## (2) INFORMATION FOR SEQ ID NO:3:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: DNA (genomic)

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

245		
246	ATGGAGGCGA TGCTTCGCT CTTTGAACCC AAAGGCCGGG TCCTCCTGGT GGACGGCCAC	60
247		
248	CACCTGGCCT ACCGCACCTT CTTGCGCCTG AAGGGCCTCA CCACGAGCCG GGGCGAACCG	120
249		
250	GTGCAGGCGG TCTACGGCTT CGCCAAGAGC CTCCTCAAGG CCCTGAAGGA GGACGGGTAC	180
251		
252	AAGGCCGTCT TCGTGGTCTT TGACGCCAAG GCCCCCTCCT TCCGCCACGA GGCTACGAG	240
253		
254	GCCTACAAGG CGGGGAGGGC CCCGACCCCG GAGGACTTCC CCCGGCAGCT CGCCCTCATC	300
255		
256	AAGGAGCTGG TGGACCTCCT GGGGTTTACC CGCCTCGAGG TCCCCGGCTA CGAGGCGGAC	360
257		
258	GACGTTCTCG CCACCCTGGC CAAGAAGGCG GAAAAGGAGG GGTACGAGGT GCGCATCCTC	420